
Subject: Re: extract circle from data with idl

Posted by [Markus Schmassmann](#) on Thu, 12 Oct 2017 14:27:15 GMT

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On 10/12/2017 02:10 PM, termybel@gmail.com wrote:

> Thanks to answer but I have a probelm.

>

> You puth this: if n_elements(li) ne 1 then message, 'not exactly 1 contour'

>

> and my program say: not exactly 1 contour

>

> How I can solve it?

>

> If I ask in idl " help,/str,li" and the answer is:

>

> Structure CONTOUR_DBL_PATH_STRUCTURE, 6 tags, length=24, data length=20:

> TYPE BYTE 1

> HIGH_LOW BYTE 1

> LEVEL INT 0

> N LONG 7

> OFFSET LONG 0

> VALUE DOUBLE 9.0000000

>

> and for " help,/str,lines"

> LINES DOUBLE = Array[2, 5447]

>

> My contour isn't a perfect circle. Maybe is this the problem?

>

> This is my program where the image is a flat field panel minus dark:

>

> file_ff1='ff_100s_3.fits' ;immagine

> immagine_ff1=readfits (file_ff1, header1) ; leggo l'immagine del flat field panel

> file_dark='ff_100s_dark_3.fits' ;immagine

> immagine_dark=readfits (file_dark, header1) ; leggo l'immagine della dark

>

> n=100. ; secondi di esposizione dell'immagine

> ffp=(immagine_ff1-immagine_dark)/n

>

> ; contour per selezionare soglie di equivalore

>

> speriamo=fltarr(2048,2048) ; creo una matrice 2048x2048

> dimensioni=size(speriamo,/dimensions)

> cubo=where(ffp lt 9.5 or ffp gt 10)

>

>

>

> wrong_matrix=array_indices(dimensioni, cubo,/dimensions)

> indxw=reform(wrong_matrix(0,*))

```

> indyw=reform(wrong_matrix(1,*))
> ;ffp(indxw,indyw)=0.
> ;c = CONTOUR(ffp, dimensions=[512,512], Title='prova cubo')
>
> ; DATA  being the data to be contoured
> level=9
> contour, smooth(ffp(250:1700, 250:1700),3), path_info=li,closed=1 , path_xy=lines,
/path_data_coord, levels=[level], /path_double
> ; lix=lines(0,*)
> ; liy=lines(1,*)
> ; liyd=deriv(lix,liy)
> ;ind=where(abs(liyd) le 0.0001)
>
> if n_elements(li) ne 1 then message, 'not exactly 1 contour'
>
>
> cont_obj=obj_new('IDLAnROI',lines)
> void= cont_obj.ComputeGeometry(centroid=center)
> ;fit_ellipse(
> print, center[0:1]
>
> end

```

```

contour, smooth(ffp(250:1700, 250:1700),3), path_info=li,closed=1 , $
    path_xy=lines, /path_data_coord, levels=[level], /path_double
contour, smooth(ffp(250:1700, 250:1700),3), levels=[level]
; shows you there are more than 1 contour,
; you need to identify the correct one
; often the best is the longest
void=max(li.n,j)
line=[*,li[j].offset+lindgen(li[j].n)]
plot, line[0,*],line[1,*]
cont_obj=obj_new('IDLAnROI',line)

```
